## TESTIMONY OF MICHAEL S. KLEIN

RE: HOUSE BILL 6249- AN ACT ESTABLISHING A MORATORIUM ON THE SITING OF WIND PROJECTS UNTIL THE ADOPTION OF REGULATIONS

My name is Michael Klein. I am a biologist and wetland scientist with nearly 34 years of experience in field surveys, permitting, and environmental impact assessment in Connecticut. I served on local inland wetland and planning and zoning commissions for many years. My office has reviewed numerous development applications on behalf of town land use agencies. Today I am testifying on behalf of FairWind CT, who engaged my firm to review BNE's applications for six wind turbines at two sites in Colebrook.

Development of renewable energy sources is recognized by the conservation community and my clients as necessary to support sustainable growth. We recognize that this will most likely require trade-offs. These tradeoffs should be clearly and accurately identified, and their consideration should be explicitly recognized and incorporated into the review and approval process. Most importantly, accurate data, collected and interpreted by appropriately trained natural resource professionals, is critical to this process.

I urge you to adopt regulations that establish specific requirements for considering impact of wind and other renewable energy facility on:

Wetlands

Watercourses

Flora

Fauna

Wildlife habitat

Bio-diversity

Endangered, Threatened, and Special Concern species

Stormwater quantity/quality

These regulations should set minimum standards for data collection tailored to facility type and size and clearly establish the need for on-site surveys by qualified scientists at the permitting stage. Desk-top or other screening methods MAY be appropriate for identification of sites that are suitable for further study, but they are not an acceptable substitute for site-specific surveys. Appropriate regulations would establish the appropriate level of detail based on known issues associated with the specific technology under consideration and should be conservative in the face of significant unknowns.

Based on established principles of environmental sampling and my review of the petitions currently before the Siting Council, reasonable regulations must require that conclusions are based on data collected at the appropriate time of the year, in the appropriate location, accounting for daily, seasonal, and diurnal variations. Data collection plans must be designed and implemented by appropriately trained personnel.

The level of effort and qualifications of the field personnel should be clearly identified. Finally, reporting and impact assessment must not only be factually correct, but also presented in a way that does not obscure the real impacts. For example, it may be technically correct to report that only 4 species of songbirds and 3 mammals were observed at the site, but this information is of little use for impact assessment if it was collected during a single, 8-hour survey of a 200-acre parcel conducted in mid-winter.

Assessments must also give explicit consideration to construction stage as well as the operational phase impacts. This is especially true for wind power, since in Connecticut they are likely to involve steeply sloping sites. The assessment should consider construction access, staging, erosion and sediment control and stormwater management.

The operational phase assessment must consider waste disposal, maintenance, stormwater management, and reasonably foreseeable contingencies, as well as indirect impacts like noise and safety. Finally, since the appropriate wind conditions are un-evenly distributed across the site, the cumulative impacts of several facilities concentrated in a small geographic area should also be considered.

I urge the legislature to require pre-application scoping, to identify significant issues and stakeholders at an early stage in process. This would allow a proponent to allocate their resources appropriately and prevent substantial delays. As a biologist, there is nothing more frustrating than being retained in July to conduct a survey for box turtles, whose survey "window" typically closes in late June.

The Siting Council will need appropriately trained staff or the ability to retain third-party reviewers with specialized skills. The CT land-use enabling statutes provide a model for passing costs through to the project sponsor. Most of my firm's work for local Commissions is funded that way. Finally, the regulations should clearly establish the relationship of the Siting Council process to other environmental, land use, and bio-diversity protection regulations.

In summary, the Council cannot make environmentally sound decisions without sound data, collected according to scientifically defensible protocols, and interpreted by those with the necessary expertise. In many cases, substantial protection of natural resources and biodiversity can be accommodated by technology selection and appropriate site design. On or off-site mitigation is also possible, but resolution of these issues cannot be assumed unless they are specifically addressed in the siting process. The current regulations do not do this.